

We Claim

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Patent claims

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1. An illumination arrangement having an optical waveguide (11; 31; 43), a light source (12; 32, 33, 41), which couples emitted light into the optical waveguide, and having a mount (10; 20, 21; 22, 23; 30, 35, 38; 40, 42), which is formed as a shell from a plurality of shell elements which are connected to one another and enclose the optical waveguide at least in regions in which the light is intended to be deflected.

2. The illumination arrangement as claimed in claim 1, characterized in that the inner walls of the shell elements are designed as reflectors (16; 37; 44).

3. The illumination arrangement as claimed in claim 1 or 2, characterized in that the at least one shell element has a light exit opening (13).

4. The illumination arrangement as claimed in one of the preceding claims, characterized in that the mount for the light holder is constructed from two shell elements (20, 21; 22, 23; 40, 42).

5. The illumination arrangement as claimed in one of the preceding claims, characterized in that the shell elements contain a vertical or horizontal abutting edge and/or an overlapping fold.

6. The illumination arrangement as claimed in one of the preceding claims.

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characterized in that
the shell elements (20, 21) abut one another
approximately centrally with respect to the
optical waveguide and are constructed essentially
symmetrically.

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7. The illumination arrangement as claimed in one of
patent claims 1 to 5,
characterized in that
10 the shell elements (22, 23) contain a part (22)
which accommodates the optical waveguide
essentially on three sides and can be closed off
by a side wall (22).
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15 8. The illumination arrangement as claimed in one of
claims 1 to 5,
characterized in that
the shell elements (40, 42) contain a base part
(40) and a cover (42).

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9. The illumination arrangement as claimed in one of
the preceding claims,
characterized in that
the optical waveguide and the shell elements of
25 the mount are designed as shaped parts and
coordinated with one another in such a way that
the light-guiding losses and/or bright surface
regions (hot spots) are minimal.

30 10. The illumination arrangement as claimed in one of
the preceding claims,
characterized in that
the shell elements can be connected to one another
by releasable elements (25, 26; 27, 28).

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11. The illumination arrangement as claimed in one of
the preceding claims,
characterized in that

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the light source is a light-emitting diode (LED) or a laser diode, above which the mount for the optical waveguide is arranged and which couples the emitted light directly into the optical waveguide.

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12. The illumination arrangement as claimed in one of the preceding claims,
characterized in that

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a plurality of light sources (41a, 41b, 41c; 12a, 12b) are provided.

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13. The illumination arrangement as claimed in one of the preceding claims,

characterized in that

the mount (30, 35, 38) is constructed in such a way that it can accommodate a vertically (12; 32; 42) and/or horizontally (33) emitting light source.

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14. A method for producing an illumination arrangement as claimed in one of patent claims 1 to 13,
characterized in that

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an optical waveguide (11; 31; 43) is firstly inserted into one shell element (20; 22; 40) and is then covered by a further shell element (21; 23; 42).

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15. The method as claimed in claim 14,

characterized in that

the optical waveguide and the shell elements are produced as injection-molded parts.

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16. The method as claimed in either of claims 14 and

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characterized in that

the mount with the inserted optical waveguide are connected to a circuit board (14; 34; 45) in such a way that these are arranged above a light source

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